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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/399,545

09/20/1999

RAYMOND G. GALLAGHER

1185R1

2392

24959 7590 07/16/2009  
PPG INDUSTRIES INC  
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EXAMINER

CANFIELD, ROBERT

ART UNIT

PAPER NUMBER

3600

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/399,545	<b>Applicant(s)</b> GALLAGHER, RAYMOND G.	
	<b>Examiner</b> ROBERT J. CANFIELD	<b>Art Unit</b> 3600	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☒ Claim(s) 43-48 and 50-55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. This Office action is in response to the amendment filed 02/23/09. Claims 1-55 are pending.

2. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5,813,191 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

3. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

4. This application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An

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assignee must establish its ownership interest in order to support the consent to a reissue application required by 37 CFR 1.172(a). The assignee's ownership interest is established by:

(a) filing in the reissue application evidence of a chain of title from the original owner to the assignee, or

(b) specifying in the record of the reissue application where such evidence is recorded in the Office (e.g., reel and frame number, etc.).

The submission with respect to (a) and (b) to establish ownership must be signed by a party authorized to act on behalf of the assignee. See MPEP § 1410.01.

An appropriate paper satisfying the requirements of 37 CFR 3.73 must be submitted in reply to this Office action.

5. This application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An assignee must establish its ownership interest *in order to support the consent to a reissue application required by 37 CFR 1.172(a)*. The submission establishing the ownership interest of the assignee is informal. There is no indication of record that the party who signed the submission is an appropriate party to sign on behalf of the assignee. 37 CFR 3.73(b).

A proper submission establishing ownership interest in the patent, pursuant to 37 CFR 1.172(a), is required in response to this action.

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6. The person who signed the submission establishing ownership interest has failed to state his/her capacity to sign for the corporation or other business entity, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

It would be acceptable for a person, other than a recognized officer, to sign a submission establishing ownership interest, provided the record for the application includes a duly signed statement that the person is empowered to sign a submission establishing ownership interest and/or act on behalf of the assignee.

Accordingly, a new submission establishing ownership interest which includes such a statement above, will be considered to be signed by an appropriate official of the assignee. A separately filed paper referencing the previously filed submission establishing ownership interest and containing a proper empowerment statement would also be acceptable.

7. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

It fails to state that the person making the declaration believes the named inventor to be the original **and first** inventor of the invention claimed as required by 37 CFR 1.63(a)(4),

It fails to state that “**all** errors being corrected in the reissue application up to the time of the filing of the declaration arose with any deceptive intent on the part of the applicant”, and

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It fails to provide specific changes and point out the differences from the original claims.

8. Claims 1-55 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

9. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1-55 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

See MPEP § 1414.01.

10. Claims 43-48 and claims 50-55 are objected to under 37 CFR 1.75 as being a substantial duplicates of claims 36-41. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a

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slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no description at all of "weaking" or "weakening lines" arranged in a generally V-shape. The description of figure 12 discusses V-shaped cutouts and dotted lines 324 but fails to mention anything about weakened V-shaped lines.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 5, 6, 9-11, 14-16, 18, 19, 21-31, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5 there appears to be some missing language as the language "contacts surface of the base" is unclear. Did applicant intend "contacts a surface of the base" or "contacts the surface of the base"?

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In claim 6, the language “the radiused end of the second members of the first and second member are spaced...” is unclear. Did applicant intend “the radiused end of the second members of the first and second legs are spaced...”?

In claim 9 it is unclear which second member “the second member” references as each of the first leg and second each have been defined as having a second member. Similarly, in claims 10 and 11 it is unclear which first member “the first member” references.

In claim 10 it is unclear what “weaking lines” are. It appears applicant may have intended to recite “weakening lines”?

In claims 14 and 19 it is unclear which first member and which second member “the first member” and “the second member” reference.

In claim 16 it is unclear which second member “the second member” references.

In claim 18, “the outer legs” lack antecedent basis.

Claim 21 is indefinite because as understood the first member is not U-shaped as defined in the claim but rather the first and second members together form a U-shape. Further, “the second member” lacks antecedent basis in claim 21.

In claim 23, the preamble “the insulating unit of claim 20” lacks antecedent basis as claim 20 is directed to a spacer frame.



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In claim 33, it is unclear which second member “the second member” references.

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 2, 7, 8, 13-15 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 1,457,303 to Higgins.

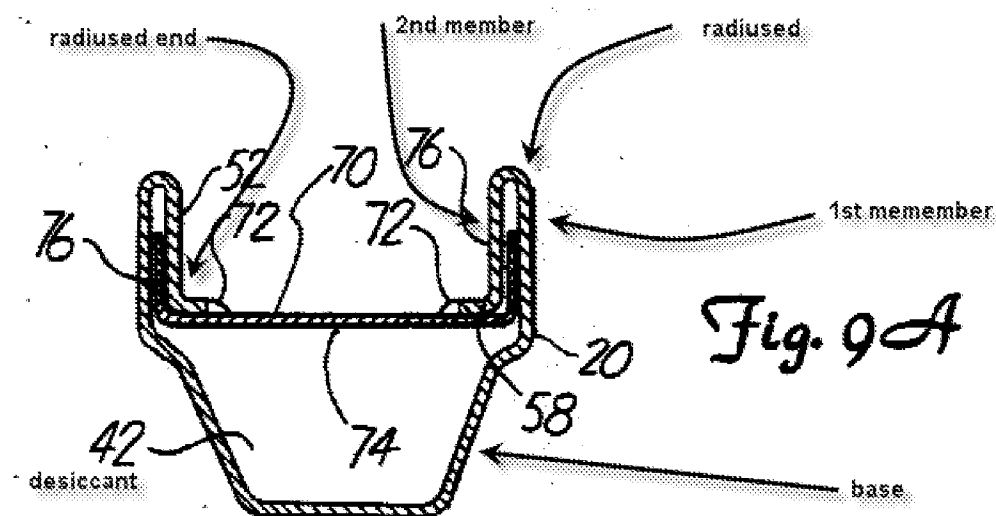
Higgins provides in figure 3 an element capable of use as a spacer frame comprised of a base 8 and first and second legs forming a generally U-shaped cross section. Each of the first and legs are comprised of first 7 and second 9 members in contact with one another and joined by a radiused portion. The legs or flanges are twice the thickness of the base and can be considered to have the “generally hairpin configuration” of claim 15.

17. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,464,874 to Shea Jr. et al.

Shea provides a window spacer comprised of a base 24, a first leg 31 and a second leg 32, wherein the legs are connected to the base to provide a U-shaped cross section and wherein the thickness of the legs is greater than the thickness of the base as clearly illustrated in figure 2.

18. Claims 1-4, 6, 13-18, 20-27, 33, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,439,716 to Larsen.

In the embodiment illustrated in Figure 9A, Larsen provides a spacer having an elongated base having first and second legs where each legs is comprised of a first member spaced from a second member in a substantially inverted U-shape. The ends of the second members are provided with a radiused bend. The shape is considered to meet the limitation of "a generally hairpin configuration". Moisture impervious securing material 38 secures the sheets 10 and 12 to the first and second legs of the spacer. A desiccant bead 42 is mounted of the base and in an area between the legs.



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19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 21-25, 28-30 and 35-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 475 213 to Hodek in view of U.S. Patent 1,457,303 to Higgins.

Hodek provides an insulating unit comprised of a pair of sheets 12 and 14 and a U-shaped spacer frame 158 formed from spacer stock (figure 12) adhered between the sheets. The spacer frame having a base and a pair of upstanding legs. A bead of moisture pervious adhesive 160 having a desiccant 162 therein is provided on the base between the legs.

Hodek fails to provide that each of the legs is comprised of a first member joined to a second member to have a U-shaped cross section.

Higgins teaches that at the time of the invention it was known that the upstanding legs of a U-shaped beam could be provided with doubled thickness as shown in figure 3 thus forming inverted U-shapes so as to increase the rigidity of the beam. The legs or flanges are twice the thickness of the base and can be considered to have the "generally hairpin configuration" of claim 24.

It would have been obvious at the time of the invention to one having ordinary skill in the art that the U-shaped spacer of Hodek could have also had its upstanding legs folded over to a double thickness so as to increase the rigidity of the spacer as taught by Higgins.

21. Claims 1, 2, 7-9, 11-15, 17-19, 21-25, and 28-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,617,699 to Thompson in view of U.S. Patent 1,457,303 to Higgins.

Thompson provides an insulating unit comprised of a pair of sheets 24 and 26 and a U-shaped spacer frame 22 formed from spacer stock (figure 3) adhered at 44 between the sheets. The spacer frame having a base and a pair of upstanding legs 30, 32. Thompson provides an embodiment having a "T" shaped cross section extending upwardly from the base as shown in figure 5. A bead of moisture pervious adhesive 52 having a desiccant therein is provided on the base between the legs. Thompson further teaches that it was known to remove portions of the legs at bend positions at 158 and an embodiment having a further sheet 136 mounted between the legs.

Thompson fails to provide that each of the legs is comprised of a first member joined to a second member to have a U-shaped cross section.

Higgins teaches that at the time of the invention it was known that the upstanding legs of a U-shaped beam could be provided with doubled thickness as shown in figure 3 thus forming inverted U-shapes so as to increase the rigidity of the beam. The legs or flanges are twice the thickness of the base and can be considered to have the "generally hairpin configuration" of claim 24.

It would have been obvious at the time of the invention to one having ordinary skill in the art that the U-shaped spacer of Thompson could have also had its upstanding legs folded over to a double thickness so as to increase the rigidity of the spacer as taught by Higgins.

22. The IDS filed 01/13/200 and the supplemental IDS filed 09/17/2001 have also been considered by the new examiner of record.

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patents showing insulated glass spacer frames as well as general constructions having shapes similar to that disclosed are listed on the attached PTO-892.

24. Applicant is reminded that whenever there is an amendment to the claims pursuant to paragraph (b) of 37 CFR 1.173, there must also be supplied, on pages separate from the pages containing the changes, the status (*i.e.*, pending or canceled), as of the date of the amendment, of all patent claims and of all added claims, and an explanation of the support in the disclosure of the patent for the changes made to the claims.

25. Any inquiry concerning this communication should be directed to ROBERT J. CANFIELD at telephone number (571)272-6840.

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Robert J Canfield

SPE

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/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635